disc **22** corresponding to the size of various coins is ready, this apparatus is easily applicable to the coins of each country. In addition, as above mentioned, although the gear part **22** of the revolving shaft **19** and the bore **34** of the carrier board **32** have a hexagonal shape, respectively, these components may consist of star type or petal type. In other words, it is desirable that the hexagonal spine is the shape which is not deformed under a strong torque.

FIG. **5** shows the other example of a stopper **100**. This stopper **100** is equivalent with two small-hole **9H** at the apical surface of the wedge part **9** of a flea tooth shape. A small steel ball **9B** is embedded via the grease for lubrication in the small hole **9H**, respectively. In this way, as the wedge part **9** is in contact with the cone part **8** of the revolving shaft **19** via the steel ball **9B**, the wedge part **9** is not worn out.

The discharge apparatus by this invention can also perform regulation of the coin thickness extremely simply and can easily exchange the discs for discharging a coin by one step.

As to the disc **22** and as shown in FIG. **6**, a thick large disc is the main disc **51** which forms the principal part of the discharge apparatus for discharging the disc body in accordance with this invention. The main disc **51** is made with a sintered metal or a die cast. The main disc **51** is inserted in the upper end part of a rotating shaft **53** via a cylinder part **52** formed in the central part and is secured.

The rotating shaft **53** is rotated counterclockwise (FIG. **6**) by means of a drive unit comprising an electric motor and a gear apparatus (not illustrated). The main disc **51** is equipped in a peripheral direction with four fairly large openings **54** at equal intervals. The circumference part of the under-surface of the main disc **51** is equipped in a peripheral direction with four triangular type fairly large hollows **55** at equal intervals. Therefore, four long and slender cutoff notches formed on the long-side part of the triangle of a hollow **55** are formed on the circumference of the main disc **51**.

The top part of the hollow **55** formed against a cutoff notch is connected to a through-hole **53**. A long and slender arm **56** is formed between adjacent hollows. In addition, the long and slender arm **56** is notched. Therefore, when the main disc **51** rotates contact between a guide pin (not shown) and the long and slender arm **56** is prevented. Some small holes **57** are formed on the circumference part of the upper surface of the main disc **51**. A small hole **57** embeds a forceful magnet **58** made from a rare earth metal.

As to the upper part of FIG. **6**, a thin large disc is the iron cover disc **61** which forms the principal part of the discharge apparatus for the disc bodies in accordance with this invention. The cover disc **61** is equipped with an open hole **62** at its central part. An open hole **62** relieves the cylinder part **52**. The cover disc **61** is in a peripheral direction equipped with four fairly large penetration tubes **64** at equal intervals adapted to register with openings **54**. The penetration tube **64** is formed downward. In addition, the diameter and the depth of the penetration tube **64** are selected in consideration of the size of the disc body for which a discharge is desired. The circumference part of the cover disc **61** includes protrusions **67**. The protrusions **67** face downward. Each protrusion **67** is received in the small hole **57** to couple the main and cover discs **51,61**.

In addition, a stir pin **69** is used in place of the protrusion **67** suitably. In this case, the stir pin **69** is made from iron. And when the stir pin **69** is used, the cover disc **61** can also be molded by resin.

As to this example which consists of the above component, the cover disc **61** is put on the main disc **51**. And, they are integrated as shown in FIG. **7**. That is, the open hole **62** of the cover disc **61** is inserted in the cylinder part **52** of the main disc **51**. Moreover, the protrusion **67** is put in the small hole **57**. The protrusion **67** and magnets **58** retain the cover disc **61** to the main disc.

In this way, if the disc body comes from the upper part of FIG. **7**, an electric motor (not shown) will operate. And, the cover disc **61** rotates counterclockwise. In this way, the disc body is put into the penetration tube **64** of any one of the cover disc **61**. When the cover disc **61** rotates, the disc body put into the penetration tube **64** slides on the upper surface of a base (not shown). One disc body which slides on the upper surface of a base is pushed from the penetration tube **64** into the opening **55** by a guide pin (not shown) which projects from the upper surface of a base into the space between main disc **51** and base.

And, when the cover disc **61** is rotated further, one of the disc bodies is pushed by a regulation pin (not shown) which projects from the upper surface of a base. At this time, one of the disc bodies is moved radially outwardly to the exterior of the cover disc **61** by action of the arm **56**. Furthermore, the cover disc **61** rotates, the disc body is pushed by only the arm **56** to the exterior of the cover disc **61** for discharge thereof. For this reason, the arm **56** is slotted in order to pass a guide pin or a regulation pin, respectively.

FIG. **9** shows the enlarged principal part of the other example of this invention.

The circumference part of a main disc **91** forms a plurality of screw holes **97**. And, the circumference part of a cover disc **101** forms a plurality of small holes **107**. And, the cover disc **101** is put on the main disc **91**. They are integrated as shown in FIG. **8**. That is, the open hole **62** of the cover disc **101** is inserted in the cylinder part **52** of the main disc **91**. And, screw **109** is penetrated in a small hole **107** and is fixed to the screw hole **97**. In this case, the head part **110** of the Bis-screw **109** is used in place of the stir pin **69**.

As mentioned above, according to this invention the main disc of a piece is provided. Furthermore, a plurality of cover discs corresponding to various coins is provided. Therefore, the discharge apparatus for the disc bodies which can change size of a discharge hole simply by only choosing a cover disc depending on the size of the disc body discharged according to this invention is obtained. In other words, the discharge apparatus forth disc bodies which can change size of a discharge hole simply depending on the size of the disc body discharged according to this invention is obtained. Especially, the discharge apparatus for the disc bodies according to this invention can exchange the disc for a discharge simply depending on the size of the required coin.

I claim:

1. A discharge apparatus for disc bodies comprising;

a fixed substrate;

a disc spaced from said substrate a distance related to the thickness of said disc bodies, said disc including at least one opening having a diameter adapted to receive a disc body;

means for rotating the disc to accent disc bodies in said opening and said space for discharge thereof, said rotating means including a shaft coupled between said disc and means for rotating the shaft for axial movement thereof and said adjusting means including an elevation body disposed about the shaft and at one end engaging the disc and at the other end including a plurality of axially extending projections and an operation body including a plurality of projections adapted to engage the projections on said elevation body, engagement of said projections displacing said disc to adjust said space.

2. The apparatus of claim 1 wherein, relative to said shaft, said projections on said elevation body and said operation body are arranged annularly and are adapted to, in response to rotation of said operation body, engage to displace said disc to adjust said space.

3. A discharge apparatus for disc bodies comprising;

a fixed substrate;

a disc spaced from said substrate a distance related to the thickness of said disc bodies, said disc including a main disc having coupled to one face thereof a cover disc, each including bores adapted to register to define at least one opening, said disc bodies accepted through said cover disc into said opening, said main disc including at least one arm disposed in said space and adapted to engage a disc body in said space for discharge thereof, said main and cover discs are coupled by one of said discs including a ferromagnetic element and the other including a magnetic element;

means for rotating the disc to accept disc bodies in said opening and said space for discharge thereof; and

means for adjusting said space to accept disc bodies of differing thicknesses.

4. The apparatus of claim 3 wherein said cover disc includes a protruding pin adapted to stir said disc bodies.

5. A discharge apparatus for disc bodies comprising;

a fixed substrate;

a disc spaced from said substrate a distance related to the thickness of said disc bodies, said disc including at least one opening having a diameter adapted to receive a disc body;

a shaft coupled between said disc and means for rotating the shaft for axial movement thereof to space said disc relative to said substrate, rotation of said disc to accept disc bodies in said opening and said space for discharge thereof;

an elevation body disposed about the shaft and at one end engaging the disc and at the other end including a plurality of axially extending projections; and

an operation body including a plurality of projections adapted to engage the projections on said elevation body, engagement of said projections displacing said disc to adjust said space to accept disc bodies of differing thicknesses.

6. The apparatus of claim 5 including a stopper to retain said shaft to said substrate.

7. The apparatus of claim 5 wherein said elevation body and operation body projections have a saw-tooth configuration.

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